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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,701	06/26/2003	Takashi Inui	JP920020120US1	5025
53493	7590	01/12/2006	EXAMINER	
LENOVO (US) IP Law Mail Stop ZHHA/B675/PO Box 12195 3039 Cornwallis Road RTP, NC 27709-2195			SHERMAN, STEPHEN G	
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DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/606,701	Applicant(s) INUI ET AL.	
	Examiner Stephen G. Sherman	Art Unit 2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6, 7, 11, 13 and 15-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-7, 11, 13 and 15-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the amendment filed 27 October 2005. Claims 1-4, 6-7, 11, 13 and 15-27 are pending. Claims 5, 8-10, 12 and 14 have been cancelled.

Response to Arguments

2. Applicant's arguments with respect to claims 1-4, 6-7, 11 and 13 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 5, 6, 11 and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Ozawa (JP 408162864 A).

Regarding claim 1, Ozawa discloses an input device comprising:

a designated value change unit (Figure 1, item 8) operable to change a designated value using a variation amount associated with the designated value (The detailed description paragraph 7, Means for Solving the Problem. The examiner interprets that when the UP button is pressed that the sound is changed by a variation amount associated with a designated value.), the designated value being changed using a predetermined first variation amount (The detailed description paragraph 7, Means for Solving the Problem, 2nd sentence states that "...Sound volume is made to increase for every step unit defined beforehand..." meaning that these steps were predetermined) when a first designated value change directive is received from an operator (Figure 1 values being inputted by items 5 and 6, the Up and DOWN buttons); and

a variation amount change unit (Figure 1, item 9) operable to alter the variation amount associated with the designated value from the predetermined first variation amount to a smaller second variation amount when a second designated value change directive that is opposite the first designated value change directive is received from the operator within a predetermined variation amount change period (The detailed description paragraph 7, Means for Solving the Problem, 1st sentence states: "If the UP key 5 is operated within predetermined time after being applied to the sound-volume control unit equipped with the apparatus in step according to actuation of the UP key 5 and the DOWN key 6 and operating the DOWN key 6 After the DOWN key 6 is operated, the sound-volume control means 4 and 8 are constituted so that augend of some volume may be made fewer than the case where the UP key 5 is operated after

predetermined time.” The examiner interprets this to mean that if the first designated value change directive were in the down direction and the second designated value change directive is in the up direction, and is made within a predetermined amount of time the variation amount is lessened. This is also shown in Figure 4, when the variation amount A changes to variation amount B. The variation amount A was made in the down direction but when the UP key was pressed, within a predetermined time period as explained earlier, the variation amount was changed to amount B which can graphically be seen to be less than amount A.),

wherein the variation amount change unit is further operable to restore the variation amount associated with the designated value from the smaller second variation amount back to the predetermined first variation amount when a variation amount retention period lapses after a previous designated value change directive is received from the operator (The detailed description paragraph 7, Means for Solving the Problem, 1st sentence states: “If the UP key 5 is operated...After the DOWN key 6 is operated, the sound-volume control means 4 and 8 are constituted so that an amount of some volume may be made fewer than the case where the UP key 5 is operated after predetermined time.” The examiner interprets this to mean that if the UP key were to have been operated after the predetermined time, then the variation amount that would be used would be the previously determined variation amount. Therefore the variation amount change and the variation amount retention periods can be the same predetermined amount of time since Ozawa discloses that the variation amount is lessened if the DOWN key is operated **within** a *predetermined time* of the UP key being

operated, and that the original variation amount is kept if the UP button is operated **after** the same *predetermined time*.).

Regarding claim 2, Ozawa discloses the input device according to Claim 1, wherein said designated value change unit comprises:

an increase unit (Figure 1, item 8) operable to increase the designated value using the variation amount associated with the designated value when an increase directive is received by the operator (Figure 1, the pressing of the UP key);

a decrease unit (Figure 1, item 8) operable to decrease the designated value using the variation amount associated with the designated value when a decrease directive is received from the operator (Figure 1, the pressing of the DOWN key);

wherein the first designated value change directive is one of the increase directive and the decrease directive and the second designated value change directive is the other of the increase directive and the decrease directive (The detailed description paragraph 7, Means for Solving the Problem. The examiner interprets that the UP button being pressed is the increase directive and that the DOWN button being pressed is the decrease directive.).

Regarding claim 3, Ozawa discloses the input device according to Claim 2, further comprising:

an increase button operable to allow the operator to input the increase directive (Figure 1, item 5); and

a decrease button operable to allow the operator to input the decrease directive (Figure1, item 6).

Regarding claim 6, Ozawa discloses the input device according to Claim 1, further comprising:

an aggregate change management unit operable to manage an aggregate change in the designated value when the variation amount associated with the designated value is altered from the predetermined first variation amount to the smaller second variation amount (Paragraph 14 of the detailed description second sentence states: "Here, a step counter is a value which shows the grand total of the count of actuation of the UP key 5 or the DOWN key 6..." The examiner interprets this step counter to be the aggregate change management unit as it would count up when the Up button would be pressed and down when the DOWN button would be pressed as any normal counter would),

wherein said variation amount change unit is operable to restore the variation amount associated with the designated value from the smaller second variation amount back to the predetermined first variation amount when the aggregate change in the designated value exceeds the predetermined first variation amount (Figure 4 shows a graphical representation of amount changes A and B. In this figure it can be seen that after increasing the variation amount by an amount B three times and it equals the amount of A, the next increase amount becomes amount A again).

Regarding claim 11, Ozawa discloses an input method, the method comprising:
storing a designated value, the designated value being associated with a variation amount (In the Detailed Description section, paragraph 11, second sentence. The examiner interprets that the sound-volume modification data is the designated values associated with variation amounts.);

changing the designated value using a predetermined first variation amount (The detailed description paragraph 7, Means for Solving the Problem, 2nd sentence states that "...Sound volume is made to increase for every step unit defined beforehand..." meaning that these steps were predetermined) when a first designated value change directive is received (The detailed description paragraph 7, Means for Solving the Problem, 1st sentence states: "If the UP key 5 is operated...After the DOWN key 6 is operated, the sound-volume control means 4 and 8 are constituted so that augend of some volume may be made fewer than the case where the UP key 5 is operated after predetermined time." The examiner interprets this to mean that the UP key is pressed after the down key which initiates a value change directive and the volume can then be changed, in this case made smaller); and

altering the variation amount associated with the designated value from the predetermined first variation amount to a smaller second variation amount when a second designated value change directive that is opposite the first designated value change directive is received within a predetermined variation amount change period (The detailed description paragraph 7, Means for Solving the Problem, 2nd sentence

states that "...Sound volume is made to increase for every step unit defined beforehand..." meaning that these steps were predetermined);

restoring the variation amount associated with the designated value from the smaller second variation amount back to the predetermined first variation amount when a variation amount retention period lapses after a previous designated value change directive is received (The detailed description paragraph 7, Means for Solving the Problem, 1st sentence states: "If the UP key 5 is operated...After the DOWN key 6 is operated, the sound-volume control means 4 and 8 are constituted so that augend of some volume may be made fewer than the case where the UP key 5 is operated after predetermined time." The examiner interprets this to mean that if the UP key were to have been operated after the predetermined time, then the variation amount that would be used would be the previously determined variation amount. Therefore the variation amount change and the variation amount retention periods can be the same predetermined amount of time since Ozawa discloses that the variation amount is lessen if the DOWN key is operated *within a predetermined time* of the UP key being operated, and that the original variation amount is kept if the UP button is operated **after** the same *predetermined time*.).

Regarding claims 18, this claim is rejected under the same rationale as claim 6.

Regarding claim 19, this claim is rejected under the same rationale as claim 7.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ozawa (JP 408162864 A) in view of Shinada et al. (US Patent 5,940,517).

Regarding claim 4, Ozawa discloses the input device of Claim 1.

Ozawa fails to teach of a display unit operable to visually display information about changes in the designated value or changes in the variation amount associated with the designated value.

Shinada et al. disclose a display unit which visually displays information about changes in a designated value (Figure 3 shows a display device which displays information about changes in the designated value through the use of a bar graph).

Therefore it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to combine the teachings of Ozawa and Shinada et al. in order to allow a user to view information about the changes being made by the device.

8. Claims 7, 13, 15-16, 20-21 and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozawa (JP 408162864 A).

Regarding claim 7, Ozawa discloses the input device of Claim 1, wherein the designated value change unit changes the designated value using the smaller second variation amount when a designated value change directive is received from the operator after the variation amount associated with the designated value has been altered from the predetermined first variation amount to the smaller second variation amount, as explained by the examiner above.

Regarding claim 13, this claim is rejected under the same rationale as claim 11.

Regarding claims 15 and 20, Ozawa discloses the input device of Claim 1 and the method of Claim 11.

Ozawa fails to teach of an input device wherein the variation amount change unit is operable to alter the variation amount associated with the designated value from the smaller second variation amount to an even smaller third variation amount when a third designated value change directive that is opposite the second designated value change directive is received from the operator within the predetermined variation amount change period.

However, it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to allow for a third even smaller variation amount in the same manner as the first and second in order to be able to further refine the amount being adjusted.

Regarding claims 16 and 21, Ozawa discloses the input device of Claim 1 and the method of claim 11.

Ozawa fails to teach wherein the variation amount change unit is operable to alter the variation amount associated with the designated value from the predetermined first variation amount to the smaller second variation amount after the second designated value change directive that is opposite the first designated value change directive, a third designated value change directive that is opposite the second designated value change directive, and a fourth designated value change directive that is opposite the third designated value change directive are received from the operator in sequence at intervals shorter than the predetermined variation amount change period.

However, it would be obvious to "one of ordinary skill" in the art at the time the invention was made to allow for a third and a fourth even smaller variation amounts after the first and second ones in order to be able to further refine the amount being adjusted.

Regarding claim 23, this claim is rejected under the same rationale as claim 6.

Regarding claim 24, this claim is rejected under the same rationale as claim 7.

Regarding claim 25, this claim is rejected under the same rationale as claim 15.

Regarding claim 26, this claim is rejected under the same rationale as claim 16.

9. Claims 17, 22 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozawa (JP 408162864 A) in view of Kim (US 5,910,798).

Regarding claims 17, 22 and 27, Ozawa discloses the input device of Claim 1, the method of claim 11, and the computer program product of Claim 13.

Ozawa fails to disclose wherein the designated value represents the position of a pointer or the brightness of a screen.

Kim discloses wherein a value is the position of a pointer on a screen (Column 2, lines 1-14).

Therefore it would have been obvious to "one of ordinary skill" in the art at the time the invention was made to use the input device as discloses by Ozawa as the control for a pointer on a screen in order to allow for finely moving a cursor on a screen.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

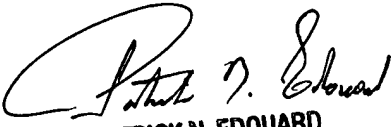
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen G. Sherman whose telephone number is (571) 272-2941. The examiner can normally be reached on M-F, 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SS



PATRICK N. EDOUARD
SUPERVISORY PATENT EXAMINER

9 January 2006